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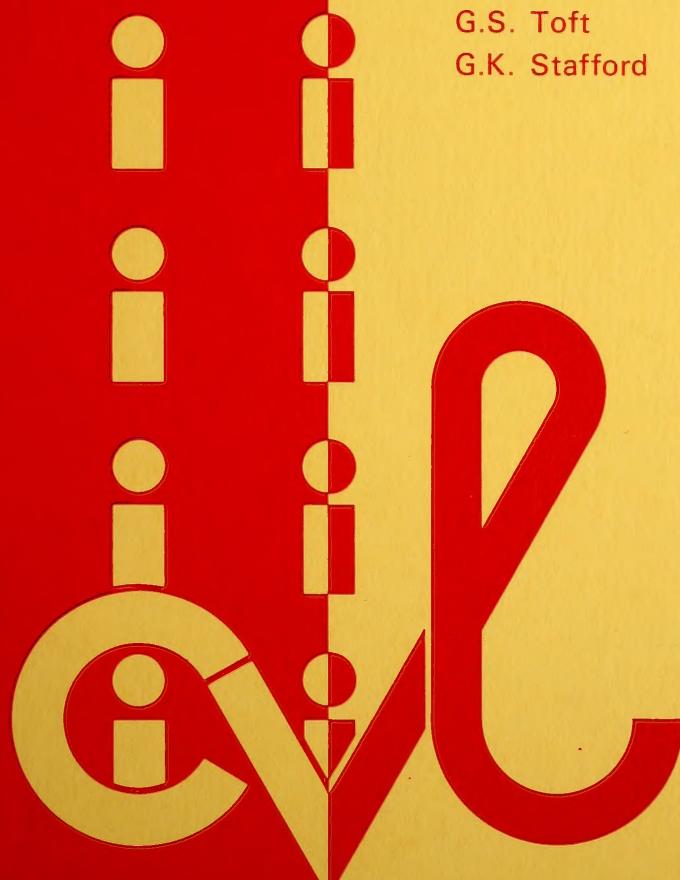


JOINT HIGHWAY
RESEARCH PROJECT

JHRP-77-7

TRAFFIC SPEED REPORT NO. 99

G.S. Toft
G.K. Stafford



PURDUE
INDIANA STATE UNIVERSITY
HIGHWAY COMMISSION

TRAFFIC SPEED REPORT NO. 99

TO: J. F. McLaughlin, Director May 16, 1977
Joint Highway Research Project
FROM: H. L. Michael, Associate Director File: 8-3-3
Joint Highway Research Project Project: C-36-10C

The attached Progress Report No. 99 on Traffic Speeds is the report of the October-December 1976 quarterly study of free-flowing automobile and truck speeds on rural, tangent, level sections of Interstate, 4-lane and 2-lane and on urban interstate highways in Indiana. The report has been prepared by Mr. G. S. Toft, a Graduate Instructor in Research on our staff, under the direction of Professor H. L. Michael. The data were collected by Mr. G. K. Stafford and a number of graduate assistants on our staff.

The results indicate similar speeds for all passenger cars as those of the July-September 1976 Study. The speeds of heavy trucks, however, were found to average 1.1 mph lower for this period than for the last quarter.

Copies of the report will be sent to the Federal Highway Administration and the ISHC for review, comment and acceptance as fulfillment of the objectives of this HPR Part I Study. Copies of the report are requested for release to the Indiana State Police and the Indiana Office of Traffic Safety as a normal procedure for these reports.

Respectfully submitted,

Harold L. Michael
Harold L. Michael
Associate Director

HLM/ss

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Interim Report

TRAFFIC SPEED REPORT NO. 99

by

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Graduate Instructor in Research

and

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Joint Highway Research Project

File No.: 8-3-3

Project No.: C-36-10C

Prepared as Part of an Investigation

Conducted by

Joint Highway Research Project
Engineering Experiment Station
Purdue University

in cooperation with the

Indiana State Highway Commission

and the

U. S. Department of Transportation
Federal Highway Administration

The opinions, findings and conclusions expressed in this publication are those of the authors and not necessarily those of the Federal Highway Administration.

Purdue University
West Lafayette, Indiana
May 16, 1977

TECHNICAL REPORT STANDARD TITLE PAGE

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16. Abstract This report is another in the continuing study of speeds of vehicles on Indiana Highways. Observations of spot speeds were taken on interstate, four-lane and two-lane highways throughout the state during the months of November and December 1976.		
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TRAFFIC SPEED REPORT NO. 99

This report is an analysis of spot speed observations made during November and December 1976. All observations were made of free-flowing vehicles on level, tangent sections of rural and urban highways during daylight and under favorable conditions.

The speed monitoring stations for each highway classification were divided into two groups. The first group is identified as "primary control stations" and studied from the same locations on selected Federal and State highways as used in the previous quarterly studies. The second group is selected at random for each quarterly study. A third group of "secondary control stations" is used only in the annual study conducted during the July-September quarter.

Fourteen speed monitoring stations were used for this reported study. Seven of these stations were the control stations noted above. The other seven stations were selected at random.

Stations were classified as two-lane, four-lane, rural interstate, or urban interstate highways. A representative sample of spot speeds was obtained at each station in each classification. The site locations were as follows: (See Figure A)

TRAFFIC SPEED SURVEY FOR THE STATE OF INDIANA
AND THE CITY OF BLOOMINGTON, INDIANA
TO ESTIMATE TRAFFIC SPEEDS AND TRAFFIC VOLUMES TO ESTIMATE
TRAFFIC VOLUMES AND TRAFFIC SPEEDS IN THE STATE OF INDIANA

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Rural Interstate Highways

*RI-21 (I-69) 2.1 miles south of junction of SR 18

*RI-6 (I-65) 7.5 miles north of junction of SR 160

RI-3 (I-64) At bridge Exit 72 (SR 145)

RI-16 (I-70) 0.6 mile east of Mile Marker 128, @ Bridge 400E

Four-lane Highways

*4L-32 (U.S. 30) 2.0 miles east of junction of SR 49

*4L-17 (U.S. 52) .25 mile east of Co. Rd. 475W

4L-13 (U.S. 41) NB: 4.3 miles south of SR 58
SB: @ Sullivan-Knox Co. Line

4L-14 (U.S. 40) 0.95 mile east of Stringtown

Two-lane Highways

*2L-18 (U.S. 35) 1.5 miles east of junction of I-69

*2L-54 (U.S. 231) 1.0 mile south of junction of SR 234

2L-7 (S.R. 46) 0.5 mile west of Gnaw Bone

2L-38 (S.R. 27) 2.0 miles south of College Corner

Urban Interstate Highways

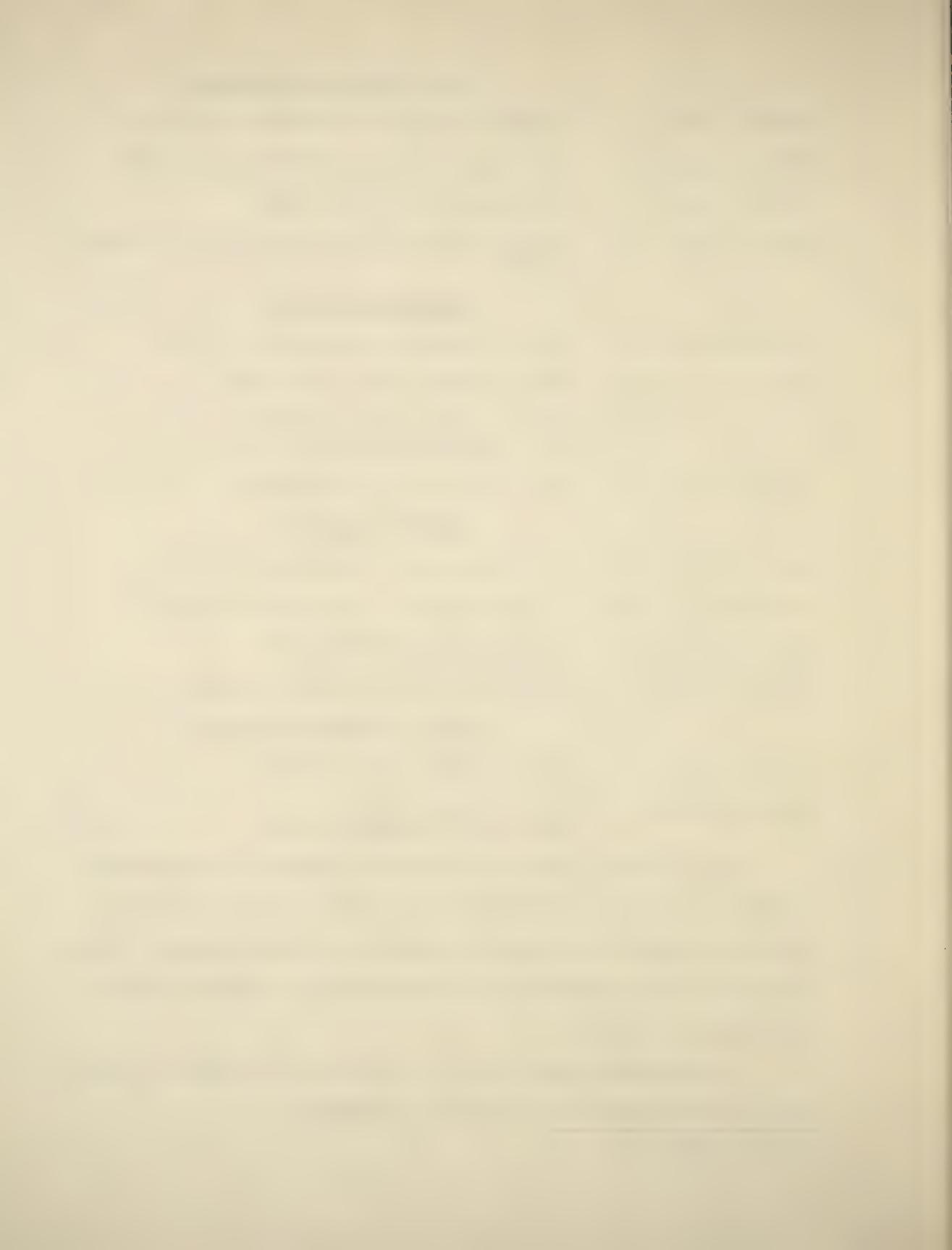
*UL-6 (I-65) East of White River Bridge

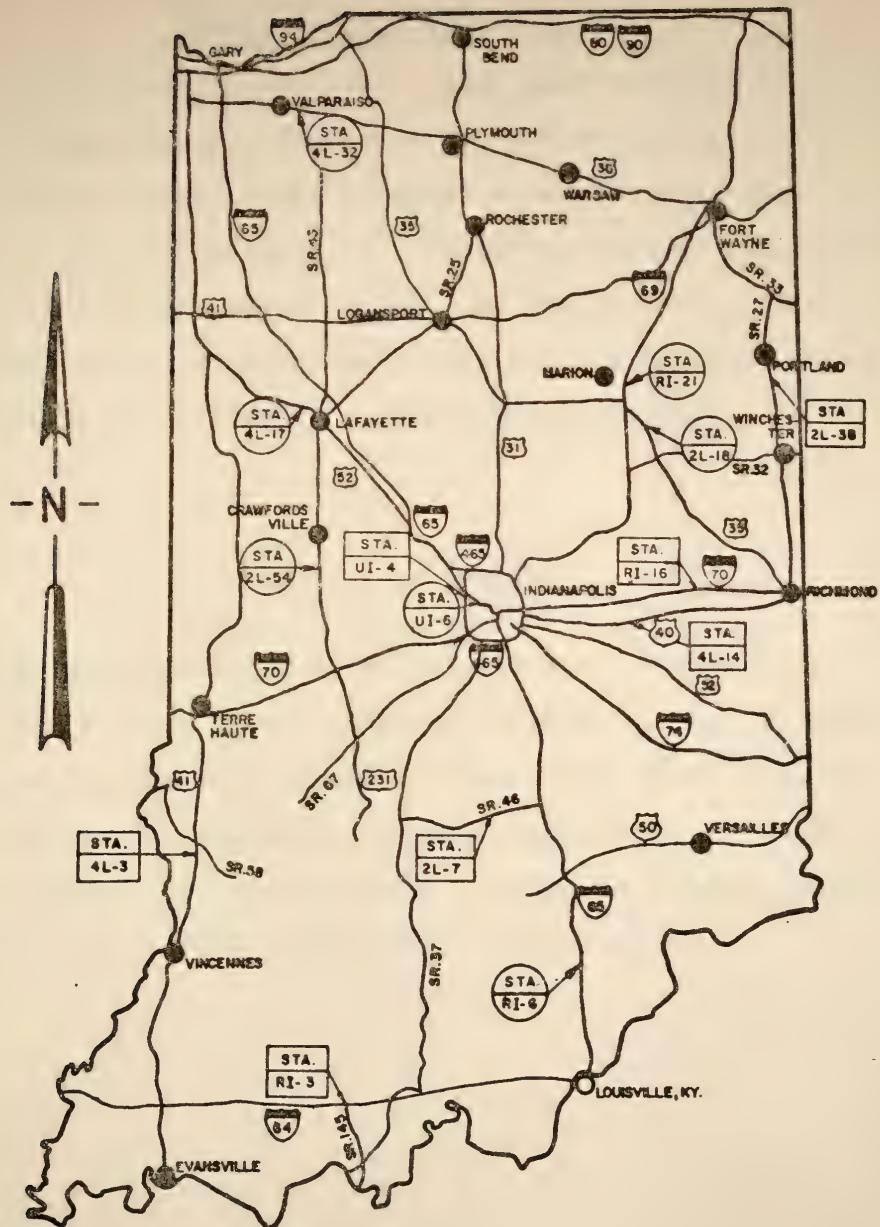
UL-4 (I-465) NB: 15 Mile Bridge
SB: @ 34th Street Bridge

The vehicles were classified as Indiana or Non-Indiana Passenger Cars and Light (less than 5000 lbs. gross weight) or Heavy (equal to or more than 5000 lbs. gross weight) Trucks. The analysis was performed as classified and combined, passenger cars or trucks.

The maximum speed limit in Indiana is 55 miles per hour, both on Interstate and other rural highways.

*Control stations





NOTE:

○ Primary control stations
■ Random stations

FIGURE A , LOCATIONS OF SPEED-STUDY STATIONS

Equipment and Field Procedure

The observations for this study were obtained by use of a Radar Speed Meter. The meter was placed approximately four feet from the edge of the pavement at angles less than 10° with the highway center line. No corrections of speeds were necessary at these small angles. At the beginning of the study the accuracy of the meter was checked and any constant discrepancy of readings was corrected accordingly.

RESULTS OF ANALYSIS

The data collected were analyzed and are summarized in Tables 1 to 14 in the Appendix. Tables 15, 16, 17 and 18 summarize the data for rural interstate, four lane, two lane and urban interstate highways, respectively. Table 19 is the summary for all highways. Tables 20 through 34 are summaries in an FHWA format which is desired.

The average speed for each classification of vehicles on each type of highway for this study was as follows:

	<u>Interstate</u>		<u>Other</u>	
	<u>Urban</u>	<u>Rural</u>	<u>Four Lane</u>	<u>Two Lane</u>
<u>Passenger Cars:</u>				
Indiana	57.3	59.7	58.1	56.4
Non-Indiana	57.8	60.1	59.8	56.3
All Passenger Cars	57.3	59.9	58.3	56.4
85 Percentile (all)	61.2	64.5	63.7	61.4
<u>Trucks:</u>				
Less than 5000 lbs.	55.7	57.9	56.8	54.9
5000 lbs. or more	55.4	57.4	55.9	54.4
<u>All Vehicles:</u>				
Average	56.6	58.9	57.5	55.7
85 Percentile	60.7	63.6	62.7	60.8

The percent of vehicles exceeding the speed limit (55 mph) for each classification of vehicle and each type of highway was as follows:

	<u>Interstate</u>		<u>Other</u>	
	<u>Urban</u>	<u>Rural</u>	<u>Four Lane</u>	<u>Two Lane</u>
<u>Passenger Cars:</u>				
Indiana	64.9	79.9	68.6	55.7
Non-Indiana	75.9	81.7	75.4	56.6
All Passenger Cars	66.0	80.7	69.4	55.8
<u>Trucks:</u>				
Less than 5000 lbs.	51.9	65.7	55.7	47.3
5000 lbs. or more	49.3	63.1	57.4	45.0
<u>All Vehicles:</u>				
	60.0	73.7	64.2	52.1

The percent of vehicles traveling more than 5 mph above the speed limit (exceeding 60 mph) for each case was as follows:

	<u>Interstate</u>		<u>Other</u>	
	<u>Urban</u>	<u>Rural</u>	<u>Four Lane</u>	<u>Two Lane</u>
<u>Passenger Cars:</u>				
Indiana	23.2	40.3	31.5	21.2
Non-Indiana	22.2	44.9	42.4	22.2
All Passenger Cars	23.1	42.4	32.7	21.3
<u>Trucks:</u>				
Less than 5000 lbs.	11.6	31.4	26.1	14.3
5000 lbs. or more	13.5	24.9	20.6	12.0
All Vehicles:	19.2	35.8	28.8	18.2

The percent of vehicles traveling more than 10 miles per hour above the speed limit (exceeding 65 mph) for each case was as follows:

	<u>Interstate</u>		<u>Other</u>	
	<u>Urban</u>	<u>Rural</u>	<u>Four Lane</u>	<u>Two Lane</u>
<u>Passenger Cars:</u>				
Indiana	5.1	12.6	9.6	6.7
Non-Indiana	3.7	13.4	16.1	4.0
All Passenger Cars	5.0	13.0	10.3	6.5
<u>Trucks:</u>				
Less than 5000 lbs.	1.6	8.6	7.2	3.4
5000 lbs. or more	2.9	5.5	4.3	0.8
All Vehicles:	4.0	10.2	8.4	4.8

Summary and Conclusions

The overall average speed for all vehicles and passenger cars in this study was found to be 57.3 and 58.0 mph, respectively. The overall average speeds for heavy trucks and for all trucks were found to be 56.0 mph and 56.1 mph, respectively. These overall average speeds are about the same for all vehicles and passenger cars as the results of July-September 1976. However, the overall average speeds for heavy trucks and for all trucks are 1.1 mph and 0.9 mph, respectively, below the results for the July-September 1976 study.

Table A presents a comparison of the overall speed results with that of the previous two studies. The 85th percentile speed of passenger cars has risen slightly over the three periods under consideration, whereas the 85th percentile speed has fallen for trucks over the same period.

A comparison of October-December 1976 speed data with that for other recent periods for several types of highway for passenger cars and trucks is shown in Tables B, C, D and E.

The decrease in the average speed for all trucks occurred on all highway types, but most noticeably on urban interstate highways (as compared to the July-September 1976 study). On the other hand, the average speeds and 85th percentile speeds for passenger cars were about the same on rural interstate and 2-lane highways, while such speeds increased on other four-lane highways and decreased on urban interstate highways, from the July-September 1976 study.

TABLE A
COMPARISON OF THE OVERALL SPEED RESULTS

	Oct.-Dec. <u>1976</u>	July-Sept. <u>1976</u>	April-June <u>1976</u>
<u>Average:</u>			
All Passenger Cars	58.0	58.0	57.1
Heavy Trucks	56.0	57.1	56.6
All Trucks	56.1	57.0	56.1
<u>85 Percentile:</u>			
All Passenger Cars	63.0	62.7	61.8
Heavy Trucks	60.9	61.9	61.9
All Trucks	61.0	61.9	61.4
<u>15 Percentile:</u>			
Heavy Trucks	50.3	51.4	50.5

TABLE B
AVERAGE SPEEDS ON INTERSTATE HIGHWAYS (URBAN)

	Oct.-Dec. 1976	July-Sept. 1976	April-June 1976	Jan.-Mar. 1976
<u>Passenger Cars:</u>				
Indiana	57.3	58.4	57.5	57.2
Non-Indiana	57.8	58.6	57.8	57.5
All Passenger Cars	57.3	58.4	57.5	57.2
85 Percentile (all)	61.2	63.6	61.6	61.0
<u>Trucks:</u>				
Less than 5000 lbs.	55.7	57.7	56.4	57.0
5000 lbs. or more	55.4	57.3	54.8	54.4

TABLE C
AVERAGE SPEEDS ON INTERSTATE HIGHWAYS (RURAL)

	Oct.-Dec. 1976	July-Sept. 1976	April-June 1976	Jan.-Mar. 1976
<u>Passenger Cars:</u>				
Indiana	59.7	59.5	58.1	57.4
Non-Indiana	60.1	60.2	58.9	58.0
All Passenger Cars	59.9	59.8	58.6	57.5
85 Percentile (all)	64.5	64.3	62.5	61.8
<u>Trucks:</u>				
Less than 5000 lbs.	58.0	58.5	57.1	56.5
5000 lbs. or more	57.4	58.4	58.7	56.7



TABLE D
AVERAGE SPEEDS ON OTHER FOUR-LAND HIGHWAYS

	Oct.-Dec. 1976	July-Sept. 1976	April-June 1976	Jan.-Mar. 1976
<u>Passenger Cars:</u>				
Indiana	58.1	57.2	57.1	57.7
Non-Indiana	59.8	57.8	57.2	58.6
All Passenger Cars	58.3	57.3	57.1	57.8
85 Percentile (all)	63.7	61.8	61.9	62.2
<u>Trucks:</u>				
Less than 5000 lbs.	56.8	56.9	56.6	57.0
5000 lbs. or more	55.9	56.6	57.0	54.9

TABLE E
AVERAGE SPEEDS ON TWO-LANE HIGHWAYS

	Oct.-Dec. 1976	July-Sept. 1976	April-June 1976	Jan.-Mar. 1976
<u>Passenger Cars:</u>				
Indiana	56.4	56.4	55.3	56.4
Non-Indiana	56.3	57.8	55.3	55.9
All Passenger Cars	56.4	56.6	55.3	56.4
85 Percentile (all)	61.4	61.5	60.7	60.5
<u>Trucks:</u>				
Less than 5000 lbs.	54.9	55.6	53.5	55.2
5000 lbs. or more	54.4	55.4	53.5	53.4

TABLE 1 SPEED DATA

Station RI-21		Highway 1-69		Location 2.1 Miles South of S.R. 18					
No. of Lanes	4	Type of Surface	Concrete	Weather Pt. Cloudy					
This Observation		Last Previous Observation (Speed Report No. 96)							
Date	1/8/76	Date	8/18/76						
Time	10:55-11:55 AM NB	Time	9:40 AM-12:05PM						
	12:22-1:12 PM SB								

PASSENGER CARS								TRUCKS			
				Indiana		Non-Indiana		All		<5000 lbs.	
OBSERVATION		Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent
No. of vehicles obs.	276	279	169	166	107	113	151	181	55	50	96
Ave. speed (m.p.h.)	59.49	59.39	59.48	58.95	59.50	60.04	58.86	56.73	57.62	57.66	59.57
Standard deviation	4.410	5.005	4.550	4.999	4.201	4.966	4.655	5.143	4.412	6.393	4.663
24 m.p.h.	0	0	0	0	0	0	0	0	0	0	0
29 m.p.h.	0	0	0	0	0	0	0	0	0	0	0
34 m.p.h.	0	0	0	0	0	0	0	0	0	0	0
39 m.p.h.	0	0	0	0	0	0	0	0	0	0	0
44 m.p.h.	0	0	0	0	0	0	0	0	0	0	0
49 m.p.h.	0.72	1.79	1.18	1.20	0	2.65	1.99	7.18	3.64	2.21	0
54 m.p.h.	12.32	16.49	11.83	19.28	13.08	12.39	17.88	32.04	23.64	38.00	14.58
59 m.p.h.	51.45	53.05	53.25	57.23	48.60	46.90	56.29	74.03	69.09	72.00	48.96
64 m.p.h.	87.68	86.38	86.98	86.14	88.79	86.73	86.09	93.37	90.91	86.00	83.33
69 m.p.h.	98.91	96.77	98.82	97.59	99.07	95.58	99.34	98.34	100.0	96.00	98.96
74 m.p.h.	99.64	99.28	99.41	100.0	100.0	98.23	100.0	100.0	100.0	100.0	100.0
79 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
84 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
89 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
All Vehicles	126	157	88	110	38	47	85	84	24	16	61
Bind	60.34	59.69	60.53	59.19	59.89	60.85	59.34	57.21	57.71	57.25	59.98
Average speed	150	122	81	56	69	66	66	97	31	34	35
No. of vehicles obs.	58.77	59.01	58.33	58.48	59.29	59.45	53.24	56.32	57.55	56.97	58.86
Average speed	55.97	55.97	55.97	55.97	55.97	55.97	55.97	55.97	55.97	55.97	55.97

TABLE 2 SPEED DATA

Station	RI-6	Highway	1-65	Location 7.5 Miles North of S.R. 160		
No. of Lanes	4	Type of Surface	Concrete			
This Observation				Last Previous Observation (Speed Report No. 98)		
Date	11/18/76	Date	8-9-76			
Time	10:36-11:23 AM - NB	Time	8:20-11:30 PM (Night)			
9:05-10:07 AM - SB						

	PASSENGER CARS						TRUCKS											
	All			Indiana			Non-Indiana			All			<5000 lbs.			>5000 lbs.		
OBSERVATION	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent
No. of vehicles obs.	248	246	248	161	Not	85	172	195	21	45	151	149						
Ave. speed (m.p.h.)	57.77	60.09	57.97	60.45	ref.	59.39	55.78	58.17	57.10	57.72	55.60	53.32						
Standard deviation	5.018	4.731	5.018	4.672	cord	4.791	3.837	4.823	3.032	4.241	3.909	3.963						
24 m.p.h.	0	0	0	0	ed	0	0	0	0	0	0	0						
29 m.p.h.	0	0	0	0		0	0	0	0	0	0	0						
34 m.p.h.	0	0	0	0		0	0	0	0	0	0	0						
39 m.p.h.	0	0	0	0		0	0	0	0	0	0	0						
44 m.p.h.	0.81	.41	0.81	0		1.18	0	0	0	0	0	0						
49 m.p.h.	2.82	.41	2.82	0		1.18	5.81	1.54	0	0	0	0						
54 m.p.h.	22.98	11.79	22.98	9.94		15.29	38.95	23.59	19.05	23.91	41.72	23.49						
59 m.p.h.	67.74	46.34	67.74	45.34		48.24	84.88	62.05	85.71	62.04	84.77	61.74						
64 m.p.h.	90.32	84.55	90.32	83.23		87.06	99.42	90.77	100.0	93.48	99.34	89.93						
69 m.p.h.	97.98	96.34	97.98	96.65		97.65	100.0	97.44	100.0	100.0	100.0	96.24						
74 m.p.h.	99.6	100.0	99.6	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0						
79 m.p.h.	99.6	100.0	99.6	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0						
84 m.p.h.	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0						
89 m.p.h.	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	100.0	100.0	100.0						
No. of vehicles obs.	116	122	116	74		48	92	95	11	26	81	69						
Average speed	59.10	60.15	59.10	60.03		59.92	57.00	56.91	58.18	57.23	56.84	56.78						
No. of vehicles obs.	132	124	132	87		37	80	100	10	20	70	80						
Average speed	56.98	60.02	56.98	60.59		58.70	54.39	59.38	55.90	58.35	54.17	59.64						

TABLE 3 SPEED DATA

Station RI-3 Highway 1-64 Location At Bridge Exit 72 (S.R. 145)
 No. of Lanes 4 Type of Surface Asphalt
 This Observation Date 11/17/76
 Time 1:28-3:30 PM - WB
 3:50-5:35 PM - EB

OBSERVATION	PASSENGER CARS						TRUCKS					
	All			Indiana			Non-Indiana			All		
	Last	Pres- ent	Last	Last	Pres- ent	Last	Pres- ent	Last	Pres- ent	Last	Pres- ent	Last
No. of vehicles obs.	249		107		142		174		48		126	
Ave. speed (m.p.h.)	60.96		60.64		61.21		58.82		58.44		58.97	
Standard deviation	5.556		5.200		5.815		5.570		5.989		5.420	
24 m.p.h.	0		0		0		0		0		0	
29 m.p.h.	0		0		0		0		0		0	
34 m.p.h.	0		0		0		0		0		0	
39 m.p.h.	0		0		0		0		0		0	
44 m.p.h.	0		0		0		0		0		0	
49 m.p.h.	0		0		0		0		0		0	
54 m.p.h.	0		0		0		0		0		0	
59 m.p.h.	0		0		0		0		0		0	
64 m.p.h.	0		0		0		0		0		0	
69 m.p.h.	0		0		0		0		0		0	
74 m.p.h.	0		0		0		0		0		0	
79 m.p.h.	0		0		0		0		0		0	
84 m.p.h.	0		0		0		0		0		0	
89 m.p.h.	0		0		0		0		0		0	
No. of vehicles obs.	137		64		73		15		23		52	
Average speed	61.64		61.53		61.74		59.27		58.13		59.77	
No. of vehicles obs.	112		43		69		99		25		74	
Average speed	60.13		59.30		60.65		58.48		58.72		58.41	

TABLE 4 SPEED DATA

Station RI-16 Highway 1-70
 No. of Lanes 4 Type of Surface Concrete
 This Observation Date 11/11/76
 Time 9:18-11:42 AM

Location 0.6 Mile East of Mile 128, 0 Bridge 4001
 Weather Cloudy
 Last Previous Observation (Speed Report No.)
 Date None Taken
 Time

	PASSENGER CARS						TRUCKS					
	All		Indiana		Non-Indiana		All		<5000		>5000	
OBSERVATION	Last	Pres-ent	Last	Pres-ent	Last	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last
No. of vehicles obs.	299		147		152		205		31		174	
Ave. speed (m.p.h.)	59.30		59.03		59.55		56.59		59.00		56.16	
Standard deviation	5.062		5.016		5.109		4.333		4.597		4.152	
24 m.p.h.	0	0	0	0	0		0	0	0	0	0	
29 m.p.h.	0	0	0	0	0		0	0	0	0	0	
34 m.p.h.	0	0	0	0	0		0	0	0	0	0	
39 m.p.h.	0	0	0	0	0		0	0	0	0	0	
44 m.p.h.	0	0	0	0	0		0	0	0	0	0	
49 m.p.h.	1.67	2.04	1.32	4.39	0		0	0	0	0	0	
54 m.p.h.	13.71	14.97	12.50	35.61	16.13		39.02					
59 m.p.h.	58.19	61.22	55.26	75.12	51.61		79.31					
64 m.p.h.	85.95	85.71	86.18	94.63	83.87		96.55					
69 m.p.h.	96.66	97.28	96.05	100.0	100.0		100.0		100.0		100.0	
74 m.p.h.	99.00	100.0	98.03	100.0	100.0		100.0		100.0		100.0	
79 m.p.h.	100.0	100.0	100.0	100.0	100.0		100.0		100.0		100.0	
84 m.p.h.	100.0	100.0	100.0	100.0	100.0		100.0		100.0		100.0	
89 m.p.h.	100.0	100.0	100.0	100.0	100.0		100.0		100.0		100.0	
No. of vehicles obs.	143	70	73	95	14		31					
Average speed	60.40	59.79	60.99	58.25	61.57		57.62					
No. of vehicles obs.	156	77	79	110	17		93					
Average speed	58.29	58.35	58.23	55.15	56.88		54.83					

TABLE 5 SPEED DATA

Station 4L-32	Highway U.S. 30		Location At Co. Rd. 400E, 2.1 Miles East of S.R. 49	
No. of Lanes	4	Type of Surface	Asphalt	Weather Clear
This Observation				Last Previous Observation (Speed Report No. 98)
Date	11/3/76	Date	7/14/76	
Time	9:30-12:35 AM	Time	3:34-5:43 PM	

OBSERVATION	PASSENGER CARS						TRUCKS					
	All			Indiana			Non-Indiana			All		
	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent
No. of vehicles obs.	254	197	188	165	66	32	167	250	66	59	101	191
Ave. speed (m.p.h.)	56.19	57.87	56.34	57.61	55.77	59.25	56.02	55.73	56.08	56.92	55.98	55.37
Standard deviation	53.05	5.244	5.606	5.327	4.339	4.628	5.429	5.969	5.652	7.825	5.307	5.238
Less	24 m.p.h.	0	0	0	0	0	0	0	0	0	0	0
	29 m.p.h.	0	0	0	0	0	0	0	0	0	0	0
	34 m.p.h.	0	0	0	0	0	0	0	0	0	0	0
	39 m.p.h.	0	0	0	0	0	0	0.60	0.80	1.52	1.69	0.52
	44 m.p.h.	1.57	1.02	2.13	1.21	0	0	1.80	5.60	4.55	8.47	0
	49 m.p.h.	9.06	4.57	9.57	5.45	7.58	0	7.19	13.20	7.58	12.55	6.93
	54 m.p.h.	35.43	25.38	34.57	27.27	37.88	15.63	40.72	38.40	36.36	33.90	43.56
	59 m.p.h.	76.38	62.44	76.60	64.85	75.76	50.00	72.94	77.20	81.82	62.17	77.23
	64 m.p.h.	94.49	90.86	93.09	91.52	98.48	87.50	93.41	94.20	93.94	84.75	93.07
	69 m.p.h.	97.64	97.97	96.81	97.85	100.0	0	99.40	93.40	100.0	95.22	99.01
	74 m.p.h.	99.61	100.0	99.47	100.0	100.0	0	100.0	100.0	100.0	100.0	100.0
	79 m.p.h.	100.0	100.0	100.0	100.0	100.0	0	100.0	100.0	100.0	100.0	100.0
	84 m.p.h.	100.0	100.0	100.0	100.0	100.0	0	100.0	100.0	100.0	100.0	100.0
	89 m.p.h.	100.0	100.0	100.0	100.0	100.0	0	100.0	100.0	100.0	100.0	100.0
No. of vehicles obs.	110	100	90	78	20	22	101	111	42	27	59	84
Average speed	58.15	59.52	58.52	59.59	56.45	59.27	57.01	58.06	57.86	60.48	51.95	57.29
No. of vehicles obs.	144	97	98	87	46	10	66	139	24	32	42	107
Average speed	54.70	56.18	54.34	55.83	55.48	59.20	53.12	53.87	52.96	53.91	53.21	53.86

TABLE 6 SPEED DATA

Station 4L-17 Highway U.S. 52 Location .25 Mile East of CO. RD. 475W
 No. of Lanes 4 Type of Surface Asphalt
 This Observation Date 11/1/76 Time 9:25-2:40PM

Weather Clear
 Last Previous Observation (Speed Report No. 98)
 Date 8/27/76
 Time 1:45-4:20 PM

PASSENGER CARS										TRUCKS						
		All			Indiana			Non-Indiana			All		<5000 lbs.		>5000 lbs.	
OBSERVATION		Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	
No. of vehicles obs.	334	285	272	266	62	19	138	139	86	88	52	51	51	51		
Ave. Speed (m.p.h.)	57.11	57.23	56.93	57.25	57.98	56.89	56.26	55.30	57.23	55.26	54.65	54.65	54.65	54.65		
Standard deviation	5.556	6.259	5.455	6.342	5.965	5.087	6.420	6.476	6.418	6.322	6.151	6.151	6.151	6.151		
24 m.p.h.	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
29 m.p.h.	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
34 m.p.h.	0.30	0	0.37	0	0	0	0	0	0.72	0	0	0	0	0		
39 m.p.h.	0.60	0.70	0.74	0.75	0	0	1.45	2.16	1.16	1.14	1.92	1.92	1.92	1.92		
44 m.p.h.	1.80	2.81	2.21	3.01	0	0	4.35	5.76	3.49	3.49	5.68	5.77	5.77	5.77		
49 m.p.h.	6.59	10.53	6.25	11.28	8.06	0	12.32	11.51	9.30	9.09	11.7	11.7	11.7	11.7		
54 m.p.h.	28.74	28.07	28.68	28.20	29.03	26.32	37.68	41.01	30.23	39.77	50.00	43.14	43.14	43.14		
59 m.p.h.	69.46	64.21	10.96	63.91	62.90	62.42	68.34	73.42	65.12	77.27	75.00	80.32	80.32	80.32		
64 m.p.h.	93.11	88.42	94.12	87.97	88.71	94.74	91.30	96.40	88.37	94.32	96.15	100.0	100.0	100.0		
69 m.p.h.	98.80	97.19	98.9	96.99	98.39	100.0	99.28	97.84	98.84	95.59	100.0	100.0	100.0	100.0		
74 m.p.h.	99.10	99.65	99.26	99.62	98.39	100.0	99.100	99.28	100.0	98.86	100.0	100.0	100.0	100.0		
79 m.p.h.	100.0	99.65	100.0	99.62	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
84 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
89 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
No. of vehicles obs.	153	151	127	147	26	4	57	61	44	40	13	21	21	21		
Average speed	58.77	57.68	58.43	57.67	60.42	58.00	58.23	55.95	58.77	56.10	56.10	55.67	55.67	55.67		
No. of vehicles obs.	181	134	145	119	36	15	81	78	42	48	39	30	30	30		
Average speed	55.71	56.72	55.62	56.74	56.06	56.60	54.88	54.79	55.62	55.67	54.08	53.40	53.40	53.40		

Station	4L-3	Highway	U.S. 41	Type of Surface	Concrete	Location	4.3 Miles South of S.R. 58 @ Sullivan-Knox County Line
No. of Lanes	4					Weather	Clear
This Observation						Last Previous Observation (Speed Report No. 92)	
Date	11/15/76					Date	8/3/76
Time	12:04-4:15 PM					Time	9:12 AM - 1:25 PM

PASSENGER CARS								TRUCKS								
OBSERVATION	All				Indiana				Non-Indiana				All			
	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last
No. of vehicles obs.	254	266	182	206	72	60	169	185	74	41	95	95	124			
Ave. speed (m.p.h.)	57.58	60.24	57.51	59.95	57.75	61.57	58.49	59.45	57.82	61.05	59.00	59.00	58.92			
Standard deviation	4.640	5.573	4.791	5.297	4.278	6.375	4.699	5.820	5.130	5.822	4.244	5.745				
Less or less	24 m.p.h.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	29 m.p.h.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	34 m.p.h.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	39 m.p.h.	0	.38	0	.49	0	0	0	0	0	0	0	0	0	0	0
	44 m.p.h.	0	.75	0	.97	0	1	1.18	1.21	2.70	0	0	0	0	0	1.61
	49 m.p.h.	3.94	1.50	3.85	1.46	4.17	1.67	2.36	4.24	2.70	2.44	3.16	4.84			
	54 m.p.h.	25.20	12.41	27.47	11.65	19.44	15.00	19.53	18.79	25.58	9.76	14.74	21.77			
	59 m.p.h.	69.29	48.50	70.88	50.97	65.28	40.00	60.36	49.09	63.51	36.59	57.89	53.23			
	64 m.p.h.	92.52	78.20	91.21	80.58	95.83	70.00	89.35	83.03	89.19	75.61	89.47	85.18			
	69 m.p.h.	99.21	93.61	98.90	95.15	100.0	88.33	98.82	95.76	97.30	92.68	100.0	96.77			
	74 m.p.h.	99.21	99.25	98.90	99.15	100.0	98.33	100.0	98.79	100.0	95.12	100.0	100.0			
	79 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	84 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	89 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of vehicles obs.	25	127	78	99	47	28	86	87	33	17	53	70				
Average speed	57.87	59.63	57.68	59.23	57.94	61.04	59.19	59.86	59.73	63.47	58.85	58.99				
No. of vehicles obs.	129	139	104	107	25	32	83	78	41	24	42	54				
Average speed	57.30	60.81	57.38	60.61	57.40	61.47	57.76	58.99	56.29	59.33	59.19	58.83				

TABLE 3 SPEED DATA

Station <u>4L-14</u>	Highway <u>U.S. 40</u>
No. of Lanes <u>4</u>	Type of Surface
This Observation	
Date <u>12/14/76</u>	
Time <u>10:15-3:07 PM</u>	

Location .95 Mile East of Stringtown

Weather Clear

Last Previous Observation (Speed Report No.)
Date Not taken
Time

TABLE 9 SPEED DATA

Station 2L-18	Highway	U.S. 35	Location	1.5 Miles East of I-69
No. of Lanes 2		Type of Surface	Asphalt	Weather Pt. Cloudy
This Observation				Last Previous Observation (Speed Report No. 58)
Date 11/8/76				Date 8/18/76
Time 2:23-4:15 PM				Time 1:45-4:10 PM

OBSERVATION	PASSENGER CARS						TRUCKS					
	All			Indiana			Non-Indiana			All		
	Pres- ent	Last	Pres- ent	Last	Pres- ent	Last	Pres- ent	Last	Pres- ent	Last	Pres- ent	Last
No. of vehicles obs.	281	330	221	298	60	32	167	151	64	75	103	75
Ave. speed (m.p.h.)	56.14	56.68	56.10	56.75	56.28	56.00	54.65	55.44	55.78	55.45	53.94	55.44
Standard deviation	5.189	5.807	3.066	5.860	5.857	5.328	6.359	4.874	7.367	5.029	5.566	4.746
24 m.p.h.	0	0	0	0	0	0	0	0	0	0	0	0
29 m.p.h.	0	0	0	0	0	0	0	0	0	0	0	0
34 m.p.h.	0.36	0	0	0	0	1.67	0	0	0	0	0	0
39 m.p.h.	0.36	0	0	0	1.67	0	1.20	0	1.56	0	1.97	0
44 m.p.h.	1.07	.91	.45	1.01	3.33	0	5.99	3.31	3.13	2.63	7.77	4.00
49 m.p.h.	8.19	6.67	8.60	6.71	6.67	6.25	17.37	11.26	12.50	11.84	20.39	10.67
54 m.p.h.	37.72	42.12	38.01	36.24	36.67	34.38	49.70	40.40	42.19	39.47	54.37	41.33
59 m.p.h.	76.16	76.36	77.83	75.17	70.00	87.50	85.03	97.47	85.94	78.95	84.47	80.00
64 m.p.h.	93.95	91.21	94.12	90.94	93.33	93.75	95.81	98.01	92.19	97.37	98.06	98.67
69 m.p.h.	98.93	96.36	98.64	96.31	100.0	96.88	99.90	100.0	98.94	100.0	100.0	100.0
74 m.p.h.	99.64	98.79	99.55	98.66	100.0	100.0	99.40	100.0	100.0	100.0	100.0	100.0
79 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
84 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
89 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of vehicles obs.	145	165	110	149	35	16	92	75	39	37	53	38
Average speed	55.96	57.72	56.02	57.84	55.77	56.62	54.20	55.51	54.87	56.14	53.70	54.89
No. of vehicles obs.	136	165	111	149	25	16	75	76	25	39	50	37
Average speed	56.33	55.64	56.18	55.66	57.00	55.37	55.20	55.38	57.20	54.79	54.20	56.00

TABLE 10 SPEED DATA

Station 2L-54 Highway U.S. 231 Location .9 Mile South of S.R. 231
 No. of Lanes 2 Type of Surface Asphalt Weather Clear

This Observation Date 11/10/76 Time 10:10-1:10 PM

Last Previous Observation (Speed Report No. 93)
 Date 8/13/76 Time 1:10 AM-1:50 PM

		PASSENGER CARS				TRUCKS					
		All		Indiana		All		<5000 lbs.		>5000 lbs.	
OBSERVATION		Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent
No. of vehicles obs.	238	239	192	223	46	16	192	211	100	64	92
Ave. speed (m.p.h.)	56.86	57.35	57.02	57.23	58.07	58.94	56.13	55.36	55.71	55.84	56.68
Standard deviation	5.462	6.254	5.567	6.328	4.968	5.013	5.880	6.645	6.811	7.218	4.648
24 m.p.h.	0	0	0	0	0	0	0	0	0	0	0
29 m.p.h.	0	0	0	0	0	0	0	0	0	0	0
34 m.p.h.	0	0	0	0	0	0	0	0	0	0	0
39 m.p.h.	.42	.42	.52	.45	0	0	.52	.49	1.00	1.56	0
44 m.p.h.	1.26	2.51	1.56	2.69	0	0	2.60	8.06	4.00	6.25	1.09
49 m.p.h.	6.72	8.79	8.33	8.97	0	0	6.25	10.42	16.11	14.0	21.88
54 m.p.h.	28.99	29.71	30.73	30.49	21.74	18.75	36.46	39.81	44.0	43.75	28.26
59 m.p.h.	71.01	69.46	70.31	69.96	73.91	62.50	78.13	72.99	80.0	68.75	76.09
64 m.p.h.	92.44	89.54	93.23	89.69	89.13	87.50	92.19	95.26	90.0	90.63	94.57
69 m.p.h.	98.74	96.23	99.48	95.96	95.65	100.0	97.40	93.58	97.0	96.88	97.83
74 m.p.h.	99.58	99.16	99.48	99.10	100.0	100.0	98.96	100.0	98.0	100.0	100.0
79 m.p.h.	100.0	99.58	100.0	99.55	100.0	100.0	99.48	100.0	99.0	100.0	100.0
84 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
89 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of vehicles obs.	118	137	98	133	20	4	102	99	55	27	47
Average speed	59.19	56.83	59.01	56.77	60.10	59.00	57.34	55.10	57.42	55.70	57.26
No. of vehicles obs.	120	102	94	90	26	12	90	112	45	37	45
Average speed	55.27	58.04	54.94	57.92	56.50	58.92	54.86	55.47	53.62	55.95	56.09

TABLE 11 SPEED DATA

Station 21-7 Highway S.R. 46 Location .5 Mile West of Gnaw Bone
 No. of Lanes 2 Type of Surface Concrete Weather Clear
 This Observation Last Previous Observation (Speed Report No. ____)
 Date 11/19/76 Date Not taken
 Time 8:25-11:40 AM Time _____

		PASSENGER CARS						TRUCKS					
		All		Indiana		Non-Indiana		All		<5000 lbs.		>5000 lbs.	
OBSERVATION		Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent
No. of vehicles obs.		342	326		16		144		93				51
Ave. speed (m.p.h.)		56.68	56.57		58.94		54.63		55.03				53.20
Standard deviation		5.935	6.005		3.714		5.366		5.478				5.127
24 m.p.h.		0	0		0		0		0				0
29 m.p.h.		0	0		0		0		0				0
34 m.p.h.		0	0		0		0		0				0
39 m.p.h.		0	0		0		0		0				0
44 m.p.h.		1.46	1.53		0		4.17		4.30				3.92
49 m.p.h.		11.11	11.66		0		13.89		13.98				13.73
54 m.p.h.		35.38	36.20		18.75		47.92		46.24				50.98
59 m.p.h.		73.39	74.54		50.00		86.11		81.72				94.12
64 m.p.h.		90.06	89.88		93.75		97.22		95.70				100.0
69 m.p.h.		97.08	96.93		100.0		100.0		100.0				100.0
74 m.p.h.		99.42	99.39		100.0		100.0		100.0				100.0
79 m.p.h.		99.42	99.39		100.0		100.0		100.0				100.0
84 m.p.h.		100.0	100.0		100.0		100.0		100.0				100.0
89 m.p.h.		100.0	100.0		100.0		100.0		100.0				100.0
All Vehicles													20
No. of vehicles obs.		176	167		9		59		39				51.90
Average speed		56.82	56.74		58.44		54.78		56.26				31
No. of vehicles obs.		166	159		7		85		54				55.19
Average speed		56.54	56.40		59.57		54.53		54.15				

TABLE 12 SPEED DATA

Station 2L-38	Highway 2	S.R. 27	Location 2 Miles South of College Corner
No. of Lanes 2	Type of Surface Concrete	Weather Fair	
This Observation		Last Previous Observation (Speed Report No.)	
Date 11/9/76	Date Not taken	____	
Time 8:50-11:55 AM	Time	____	

OBSERVATION	PASSENGER CARS						TRUCKS					
	All	Indiana		Non-Indiana		All	<5000 lbs.		>5000 lbs.		Pres-	Pres-
	Last	Pres-	Present	Last	Pres-	Present	Last	Pres-	Last	ent	ent	
No. of vehicles obs.												
Ave. speed (m.p.h.)	256	221	35	204	95	109						
Standard deviation	54.77	54.86	54.23	53.25	93.52	53.01						
24 m.p.h.	5.580	5.612	5.418	5.988	6.528	5.493						
29 m.p.h.	0	0	0	0	0	0						
34 m.p.h.	0	0	0	0	0	0						
39 m.p.h.	.78	.90	0	1.96	2.11	1.83						
44 m.p.h.	5.08	4.98	5.71	6.37	7.37	5.50						
49 m.p.h.	14.84	15.38	11.43	24.51	27.37	22.02						
54 m.p.h.	46.48	45.25	54.29	56.86	50.53	62.39						
59 m.p.h.	80.86	81.90	74.29	89.22	87.37	90.83						
64 m.p.h.	97.66	97.29	100.0	97.06	95.79	98.17						
69 m.p.h.	100.0	100.0	100.0	99.02	97.89	100.0						
74 m.p.h.	100.0	100.0	100.0	99.51	98.59	100.0						
79 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0						
84 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0						
89 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0						
No. of vehicles obs.	124	110	14	96	48	48						
Average speed	54.51	54.59	53.86	55.33	55.06	55.60						
No. of vehicles obs.	132	111	21	108	47	61						
Average speed	55.02	55.12	54.48	51.39	51.94	50.97						

TABLE 13 SPEED DATA

Station	UI-6	Highway	1-65	Location East of White River			Weather	Pt.	Cloudy
No. of Lanes	6	Type of Surface	Concrete	Last Previous Observation (Speed Report No. 98)					
This Observation		Date		Date 8/19/76					
Date		Time		Time 2:00-3:45 PM					

PASSENGER CARS										TRUCKS			
		All		Indiana		Non-Indiana		All		<5000 lbs.		>5000 lbs.	
OBSERVATION		Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent
No. of vehicles obs.	326	284	265	267	61	17	111	137	61	62	50	75	
Ave. speed (m.p.h.)	58.99	57.80	58.88	57.53	59.34	58.82	58.01	56.07	58.75	56.40	57.10	55.79	
Standard deviation	4.905	4.290	5.167	4.303	5.563	4.081	5.425	4.959	5.415	4.785	5.350	5.113	
24 m.p.h.	0	0	0	0	0	0	0	0	0	0	0	0	
29 m.p.h.	0	0	0	0	0	0	0	0	0	0	0	0	
34 m.p.h.	0	0	0	0	0	0	0	0	0	0	0	0	
39 m.p.h.	0	0	0	0	0	0	0	0	0	0	0	0	
44 m.p.h.	0	0	0	0	0	0	0	0	0	0	0	0	
49 m.p.h.	2.45	2.11	3.02	2.25	0	0	5.41	9.49	4.92	8.06	6.00	10.67	
54 m.p.h.	15.34	21.48	16.98	22.10	8.20	11.76	22.52	33.58	19.67	33.87	26.00	33.33	
59 m.p.h.	57.67	65.85	58.87	65.92	52.46	64.71	71.60	36.78	10.52	46.72	58.70	82.67	
64 m.p.h.	87.12	94.37	86.04	94.76	91.80	88.24	86.49	97.08	81.97	96.77	92.0	97.33	
69 m.p.h.	97.24	99.65	96.98	99.63	98.36	100.0	99.10	98.54	100.0	96.77	98.0	100.0	
74 m.p.h.	99.08	100.0	98.87	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
79 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
84 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
89 m.p.h.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
No. of vehicles obs.	162	135	127	27	8	48	75	23	32	25	43		
Average speed	57.41	57.63	57.39	57.57	57.56	58.62	56.52	55.95	56.57	56.62	56.48	55.44	
No. of vehicles obs.	164	149	130	140	34	9	63	62	38	30	25	32	
Average speed	60.51	57.59	60.44	57.89	60.76	59.00	59.14	56.21	60.08	56.17	57.72	56.25	

Station UI-4 Highway I-465 No. of Lanes 6 This Observation Date 11/4/76 Time 10:25-12:40 PM

TABLE 14 SPEED DATA

N.B.-@ 15 Mile Bridge Location S.B.-@ 34th Street Bridge

Weather Cloudy, Windy, Flurrie:
Date Not taken
Time _____

Last Previous Observation (Speed Report No. _____)

Passenger Cars

OBSERVATION	ALL			INDIANA			NON-INDIANA			ALL			<5000			>5000			TRUCKS		
	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Pres-ent	Last	Pres-ent	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent
No. of vehicles obs.	257	220		37			199			67									132		
Ave. speed (m.p.h.)	56.79	56.70		57.27			55.13			55.13									55.12		
Standard deviation	4.702	4.815		3.984			4.870			4.465									5.080		
24 m.p.h.	0	0		0			0			0									0		
29 m.p.h.	0	0		0			0			0								0			
34 m.p.h.	0	0		0			0			0								0			
39 m.p.h.	0	0		0			0			0								0			
44 m.p.h.	39	45		45			0			50								50			
49 m.p.h.	5.06	5.45		5.45			0			1.01								1.49			
54 m.p.h.	29.18	30.91		2.70			14.07			11.49								15.15			
59 m.p.h.	76.26	75.91		18.92			40.20			40.30								40.15			
64 m.p.h.	93.77	93.18		73.38			82.41			83.58								81.82			
69 m.p.h.	98.83	98.64		97.30			97.99			100.0								96.97			
74 m.p.h.	100.0	100.0		100.0			100.0			100.0								100.0			
79 m.p.h.	100.0	100.0		100.0			100.0			100.0								100.0			
84 m.p.h.	100.0	100.0		100.0			100.0			100.0								100.0			
89 m.p.h.	100.0	100.0		100.0			100.0			100.0								100.0			
No. of vehicles obs.	127	109		18			118			36								82			
Average speed	56.09	55.99		56.67			54.60			54.92								54.46			
No. of vehicles obs.	130	111		19			81			31								50			
Average speed	57.47	57.41		57.84			55.89			55.39								86.20			

TABLE 15 SPEED DATA

Station	Highway	Interstate, Rural	Type of Surface	Location	See Individual Stations	Weather	Last Previous Observation (Speed Report No. ____)
No. of Lanes	This Observation	Date Nov.-Dec. 1976	Time	Date Nov.-Dec. 1976	Time	Not Pertinent	Time

OBSERVATION	PASSENGER CARS				TRUCKS			
	All		Indiana		All		<5000 lbs.	
	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent
No. of vehicles obs.	1073	581	492	755	175			580
Ave. speed (m.p.h.)	59.89	59.70	60.11	57.55	57.95			57.42
Standard deviation	5.130	5.000	5.275	5.038	5.477			4.896
24 m.p.h.	0	0	0	0	0			0
29 m.p.h.	0	0	0	0	0			0
34 m.p.h.	0	0	0	0	0			0
39 m.p.h.	0	0	0	0	0			0
44 m.p.h.	.09	0	.20	.53	.57			.52
49 m.p.h.	1.21	1.03	1.42	3.84	2.86			4.14
54 m.p.h.	13.61	13.77	13.41	29.40	28.00			29.83
59 m.p.h.	50.42	52.67	47.76	66.89	61.14			68.62
64 m.p.h.	83.22	83.82	82.52	91.26	88.00			92.24
69 m.p.h.	95.90	96.73	94.92	98.28	97.71			98.45
74 m.p.h.	99.35	99.83	98.78	99.87	100.0			99.83
79 m.p.h.	100.0	100.0	100.0	100.0	100.0			100.0
84 m.p.h.	100.0	100.0	100.0	100.0	100.0			100.0
89 m.p.h.	100.0	100.0	100.0	100.0	100.0			100.0

All Vehicles
of vehicles traveling at or less
than

TABLE 16 SPEED DATA

Station	Highway	4-Lane, Rural	Location	See Individual Stations	Weather	Last Previous Observation (Speed Report No.)
No. of Lanes	Type of Surface					Date Not Pertinent
This Observation		Date	Time			Time

TABLE 17 SPEED DATA

Station	Highway 2-Lane, Rural	Location	See Individual Stations
No. of Lanes	Type of Surface	Weather	
This Observation		Last Previous Observation (Speed Report No. ____)	
Date Nov.-Dec. 1976		Date Not Pertinent	
Time		Time	

OBSERVATION	PASSENGER CARS						TRUCKS					
	All		Indiana		Non-Indiana		All		<5000 lbs.		>5000 lbs.	
	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent
No. of vehicles obs.												
Ave. speed (m.p.h.)	56.40		56.41		56.32		54.60		54.85		54.40	
Standard deviation	5.952		6.004		5.381		5.916		6.110		5.744	
24 m.p.h.	0		0		0		0		0		0	
29 m.p.h.	0		0		0		0		0		0	
34 m.p.h.	0		0		0		0		0		0	
39 m.p.h.	0.26		0.28		0		1.27		3.1		1.57	
44 m.p.h.	2.31		2.34		2.02		5.77		5.18		6.28	
49 m.p.h.	10.20		10.49		7.07		17.04		18.90		15.45	
54 m.p.h.	36.85		36.89		36.36		46.48		45.43		47.38	
59 m.p.h.	75.06		75.28		72.73		81.69		80.18		82.98	
64 m.p.h.	91.95		91.67		94.95		96.76		95.12		98.17	
69 m.p.h.	97.34		97.19		98.99		99.30		98.78		99.74	
74 m.p.h.	99.31		99.25		100.0		99.86		99.70		100.0	
79 m.p.h.	99.74		99.72		100.0		100.0		100.0		100.0	
84 m.p.h.	100.0		100.0		100.0		100.0		100.0		100.0	
89 m.p.h.	100.0		100.0		100.0		100.0		100.0		100.0	

All Vehicles

of vehicles traveling at or less than

TABLE 18 SPEED DATA

Station	Highway	Urban	Type of Surface	Location	See Individual Stations	Weather	Last Observation (Speed Report No. __)
No. of Lanes	This Observation			Date	Nov.-Dec. 1976	Date	Not Pertinent
				Time		Time	

OBSERVATION	PASSENGER CARS				TRUCKS			
	All	Indiana	Non-Indiana	All	<5000	1bs.	>5000	1bs.
Last	Pres- ent	Last	Pres- ent	Last	Pres- ent	Last	Pres- ent	Last
No. of vehicles obs.								
Ave. speed (m.p.h.)	54.1	48.7	54.		336	129		
Standard deviation	57.32	57.27	57.76		55.51	55.74		
	4.515	4.565	4.042		4.921	4.647		
24 m.p.h.	0	0	0		0	0		
29 m.p.h.	0	0	0		0	0		
34 m.p.h.	0	0	0		0	0		
39 m.p.h.	0	0	0		0	0		
44 m.p.h.	.18	.21	0		.30	0		
49 m.p.h.	3.51	3.70	1.85		1.49	.78		
54 m.p.h.	25.14	26.08	16.67		12.20	10.08		
59 m.p.h.	70.79	70.43	74.07		37.50	37.21		
64 m.p.h.	94.09	94.05	94.44		80.65	78.29		
69 m.p.h.	99.26	99.18	100.0		99.40	98.45		
74 m.p.h.	100.0	100.0	100.0		100.0	100.0		
79 m.p.h.	100.0	100.0	100.0		100.0	100.0		
84 m.p.h.	100.0	100.0	100.0		100.0	100.0		
89 m.p.h.	100.0	100.0	100.0		100.0	100.0		

of vehicles traveling at or less than

All Vehicles

TABLE 19 SPEED DATA

Station _____ Indiana Highway System _____ Location See Individual Stations
 No. of Lanes _____ Type of Surface _____ Weather _____
 This Observation _____ Last Previous Observation (Speed Report No. ____)
 Date Nov.-Dec. 1976 Date Not Pertinent _____
 Time _____ Time _____

		PASSENGER CARS						TRUCKS					
		All		Indiana		Non-Indiana		All		<5000		>5000	
		Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	Pres-ent	Last	
OBSERVATION													
No. of vehicles obs.		3851		3088		763		2526		939		1587	
Ave. speed (m.p.h.)		58.02		57.68		59.40		56.09		56.18		56.03	
Standard deviation		5.752		5.770		5.470		5.773		6.089		5.578	
less	24 m.p.h.	0		0		0		0		0		0	
	29 m.p.h.	0		0		0		0.04		0		.06	
	34 m.p.h.	0		0		0		.12		0		.19	
	39 m.p.h.	.16		.19		0		.71		.64		.76	
	44 m.p.h.	1.17		1.36		.39		3.29		3.41		3.21	
	49 m.p.h.	5.69		6.54		2.23		10.81		11.82		10.21	
	54 m.p.h.	24.93		26.85		17.17		37.21		37.59		36.99	
	59 m.p.h.	63.49		66.13		52.82		74.11		72.20		75.24	
	64 m.p.h.	88.11		88.96		84.67		94.10		92.86		94.83	
train	69 m.p.h.	96.91		97.22		95.67		98.57		97.66		99.12	
	74 m.p.h.	99.40		99.48		99.08		99.72		99.36		99.94	
	79 m.p.h.	99.82		99.77		100.0		100.0		100.0		100.0	
	84 m.p.h.	99.95		99.94		100.0		100.0		100.0		100.0	
	89 m.p.h.	99.97		99.97		100.0		100.0		100.0		100.0	

All Vehicles

of vehicles traveling at or less

TABLE 20

Monitoring of Speed
(Statistical Summary)☒ Quarterly Report--Calendar Quarter Ending Dec. 31, 1976or Annual Report--Year Ending _____

STATE Indiana

Miles	Number of Monitor Locations	Number of Vehicles Measured	Duration of Measurement Session (Hours)	Average Speed (MPH)	Median Speed (MPH)	Percent of Motorists Exceeding		
						85th Percentile Speed (MPH)	55 MPH	60 MPH
Interstate Urban	218	2	877	3.2	56.6	56.2	60.7	60
Interstate Rural	849	4	1828	9.1	58.9	58.1	63.6	74
Multi-lane, Divided	657	4	1795	14.3	57.5	57.0	62.7	64
Multi-lane, Undivided			(included in multi-lane, divided classification)					
2-Lane, Rural	8030	4	1877	11.2	55.7	55.3	60.8	52
State Total	9754	14	6377	33.8	57.2	56.6	62.2	63
								26
								7

TABLE 21
SPEED MONITORING STATION SUMMARY

HIGHWAY CATEGORY	Rural	Interstate
STATION NUMBER	FI-6	LOCATION I-65, 7.5 miles N. of S.R. 160
NUMBER OF SESSIONS	1	DATES 11/18/76
VEHICLES MEASURED	441	
AVERAGE SPEED (MPH)	59.2	STANDARD DEVIATION (MPH) 4.9
MEDIAN SPEED (MPH)	58.6	85TH PERCENTILE SPEED (MPH) 63.6
PERCENTAGE OF VEHICLES EXCEEDING:		
55 MPH:	78	60 MPH: 37
		65 MPH: 10

TABLE 22
SPEED MONITORING STATION SUMMARY

HIGHWAY CATEGORY	Rural Interstate
STATION NUMBER	RI-21
LOCATION	I-69, 2.1 mile S. of S.R. 18
NUMBER OF SESSIONS	1
DATES	11/18/76
AVERAGE SPEED (MPH)	58.3
STANDARD DEVIATION (MPH)	5.2
MEDIAN SPEED (MPH)	57.8
85TH PERCENTILE SPEED (MPH)	62.6
PERCENTAGE OF VEHICLES EXCEEDING:	
55 MPH:	95
60 MPH:	31
65 MPH:	11

TABLE 23
SPEED MONITORING STATION SUMMARY

HIGHWAY CATEGORY	Rural	Interstate
STATION NUMBER	R1-3	LOCATION
		I-64, @ Bridge, Exit 72 (S.R. 145)
NUMBER OF SESSIONS	1	DATES
		11/17/76
		VEHICLES MEASURED
		423
AVERAGE SPEED (MPH)	60.1	STANDARD DEVIATION (MPH)
		5.7
MEDIAN SPEED (MPH)	59.5	85TH PERCENTILE SPEED (MPH)
		65.4
PERCENTAGE OF VEHICLES EXCEEDING:		
55 MPH:	78	60 MPH:
		48
		65 MPH:
		16

TABLE 25
SPEED MONITORING STATION SUMMARY

HIGHWAY CATEGORY <u>Multi-Lane (Rural)</u>	
STATION NUMBER <u>4L-17</u>	LOCATION <u>U.S. 52, 30 yds. E. of Co. Rd. 475W</u>
NUMBER OF SESSIONS <u>1</u>	DATES <u>11/1/76</u>
AVERAGE SPEED (MPH) <u>56.6</u>	STANDARD DEVIATION (MPH) <u>6.4</u>
MEDIAN SPEED (MPH) <u>56.2</u>	85TH PERCENTILE SPEED (MPH) <u>61.4</u>
PERCENTAGE OF VEHICLES EXCEEDING:	
55 MPH: <u>58</u>	60 MPH: <u>23</u>
65 MPH: <u>7</u>	

TABLE 26
SPEED MONITORING STATION SUMMARY

HIGHWAY CATE GORY	Multi-Lane, Divided
STATION NUMBER	4L-32
LOCATION	U.S. 30, 2.1 mi. E of S.R. 49, at Co. Rd. 400E
NUMBER OF SESSIONS	1
DATES	11/3/76
	VEHICLES MEASURED 447
AVERAGE SPEED (MPH)	56.7
	STANDARD DEVIATION (MPH) 5.8
MEDIAN SPEED (MPH)	56.4
	85TH PERCENTILE SPEED (MPH) 61.6
PERCENTAGE OF VEHICLES EXCEEDING:	
55 MPH:	62
	60 MPH: 24
	65 MPH: 5

TABLE 27
SPEED MONITORING STATION SUMMARY

HIGHWAY CATEGORY	Multi-Lane, Divided	NB, 4.3 mi. S. of S.R. 58W
STATION NUMBER	4L-3	LOCATION U.S. 41; SB, @ Sullivan-Knox Co. Line
NUMBER OF SESSIONS	1	DATES 11/15/76
AVERAGE SPEED (MPH)	59.9	VEHICLES MEASURED 431
MEDIAN SPEED (MPH)	59.2	STANDARD DEVIATION (MPH) 5.7
		85TH PERCENTILE SPEED (MPH) 64.9
PERCENTAGE OF VEHICLES EXCEEDING:		
55 MPH:	79	60 MPH: 44
		65 MPH: 15

TABLE 28
SPEED MONITORING STATION SUMMARY

HIGHWAY CATEGORY	Multi-Lane, Divided
STATION NUMBER	4L-14
LOCATION	U.S. 40, .95 mi. E. of String Town
NUMBER OF SESSIONS	1
DATES	12/14/76
VEHICLES MEASURED	439
AVERAGE SPEED (MPH)	56.8
STANDARD DEVIATION (MPH)	6.5
MEDIAN SPEED (MPH)	56.0
85TH PERCENTILE SPEED (MPH)	61.9
PERCENTAGE OF VEHICLES EXCEEDING:	
55 MPH:	58
60 MPH:	24
65 MPH:	7

TABLE 29
SPEED MONITORING STATION SUMMARY

HIGHWAY CATEGORY	<u>Two Lane, Rural</u>
STATION NUMBER	<u>2L-18</u>
LOCATION	<u>U.S. 35, 1.5 mi. E. of I-69</u>
NUMBER OF SESSIONS	<u>1</u>
DATES	<u>11/2/76</u>
VEHICLES MEASURED	<u>481</u>
AVERAGE SPEED (MPH)	<u>56.3</u>
STANDARD DEVIATION (MPH)	<u>5.6</u>
MEDIAN SPEED (MPH)	<u>55.6</u>
85TH PERCENTILE SPEED (MPH)	<u>60.5</u>
PERCENTAGE OF VEHICLES EXCEEDING:	
55 MPH:	<u>56</u>
60 MPH:	<u>17</u>
65 MPH:	<u>5</u>

TABLE 30
SPEED MONITORING STATION SUMMARY

<u>HIGHWAY CATEGORY</u>	<u>Two Lane Rural</u>
STATION NUMBER	<u>2L-54</u>
LOCATION	<u>U.S. 231, .5 mi. S. of S.R. 234</u>
NUMBER OF SESSIONS	<u>1</u>
DATES	<u>11/10/76</u>
VEHICLES MEASURED	<u>450</u>
AVERAGE SPEED (MPH)	<u>56.4</u>
STANDARD DEVIATION (MPH)	<u>6.5</u>
MEDIAN SPEED (MPH)	<u>56.1</u>
85TH PERCENTILE SPEED (MPH)	<u>61.9</u>
PERCENTAGE OF VEHICLES EXCEEDING:	
55 MPH:	<u>58</u>
60 MPH:	<u>25</u>
65 MPH:	<u>7</u>

TABLE 31
SPEED MONITORING STATION SUMMARY

HIGHWAY CATEGORY	Two Lane Rural
STATION NUMBER	21-7
LOCATION	S.P. 46, .5 mi. W of Know Bone
NUMBER OF SESSIONS	1
DATES	11/19/76
	VEHICLES MEASURED 486
AVERAGE SPEED (MPH)	56.1
	STANDARD DEVIATION (MPH) 45.8
MEDIAN SPEED (MPH)	55.5
	85TH PERCENTILE SPEED (MPH) 62.0
PERCENTAGE OF VEHICLES EXCEEDING:	
55 MPH:	54
60 MPH:	19
65 MPH:	6

TABLE 32
SPEED MONITORING STATION SUMMARY

HIGHWAY CATE GCRY	Two Lane, Rural
STATION NUMBER 2L-38	LOCATION S.R. 27, 2 mi. S. of College Corner
NUMBER OF SESSIONS 1	DATES 11/9/76
AVERAGE SPEED (MPH) 54.1	VEHICLES MEASURED 469
MEDIAN SPEED (MPH) 53.9	STANDARD DEVIATION (MPH) 5.8
	85TH PERCENTILE SPEED (MPH) 59.1
PERCENTAGE OF VEHICLES EXCEEDING:	
55 MPH: 41	60 MPH: 12
	65 MPH: 2

TABLE 33
SPEED MONITORING STATION SUMMARY

HIGHWAY CATEGORY	Urban Interstate
STATION NUMBER	UI-6
LOCATION	I-65, E. of White River
NUMBER OF SESSIONS	1
DATES	11/4/76
VEHICLES MEASURED	421
AVERAGE SPEED (MPH)	57.2
STANDARD DEVIATION (MPH)	4.6
MEDIAN SPEED (MPH)	56.6
85TH PERCENTILE SPEED (MPH)	61.1
PERCENTAGE OF VEHICLES EXCEEDING:	
55 MPH:	66
60 MPH:	23
65 MPH:	5

TABLE 34
SPEED MONITORING STATION SUMMARY

HIGHWAY CATEGORY	Urban Interstate	
STATION NUMBER	UI-4	LOCATION NB, @ 15 mi. Bridge 1-4655; SB, @ 34th St. Bridge
NUMBER OF SESSIONS	1	DATES 11/4/76
AVERAGE SPEED (MPH)	56.1	STANDARD DEVIATION (MPH) 4.8
MEDIAN SPEED (MPH)	55.6	85TH PERCENTILE SPEED (MPH) 60.1
PERCENTAGE OF VEHICLES EXCEEDING:		
55 MPH:	55	60 MPH: 16
		65 MPH: 4

COVER DESIGN BY ALDO GIORGINI